

Docket No.: 1095.1184

Serial No. 09/838,166

# IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 3 and 4, CANCEL claims 5 and 6 and ADD new claims 7 and 8 in accordance with the following:

1. (currently amended) An information processing method for causing a computing device having a plurality of processors to carry out predetermined information processing, the information processing method comprising:  
~~a parallel processing block forming step for dividing a program to be executed into a plurality of parallel processing blocks;~~  
~~a thread forming step for dividing said parallel processing blocks formed by said parallel processing block forming step,~~ into threads which are basic units to be assigned respectively to said plurality of processors for being processed thereby; and  
~~an instructing step for instructing a predetermined processor to execute a next parallel processing block when said predetermined processor has terminated execution of said a~~  
~~respective thread assigned thereto, wherein said instructing comprises~~  
comparing a first parallel block number of a parallel processing control  
information region and a second parallel block number of a thread information region,  
and  
determining whether a corresponding thread should execute said next parallel  
processing block, wherein when execution is required, determining said next parallel  
processing block to be executed with reference to said second parallel block number,  
and when execution is not required, generating a parallel processing block control  
information region to said next parallel processing block.

2. (currently amended) An information processing method according to claim 1, wherein when a predetermined instruction is given in said program to be executed, execution of a next parallel processing block is not instructed ~~by said instructing step~~ until processing of all of said threads ~~has~~ have been terminated.

Serial No. 09/838,166

Docket No.: 1095.1184

3. (currently amended) A computer-readable recording medium which stores a program to cause a computing device having a plurality of processors to carry out predetermined information processing, said program ~~causing a computer to function as comprising:~~

parallel processing block-forming means for dividing a program to be executed into a plurality of parallel processing blocks;

thread-forming means for dividing said parallel processing blocks generated by said parallel processing block-forming means, into threads which are basic units to be assigned respectively to said plurality of processors for being processed thereby; and

instructing means for instructing a predetermined processor to execute a next parallel processing block when said predetermined processor has terminated execution of said ~~a~~ respective thread assigned thereto, wherein said instructing means comprises

comparing means for comparing a first parallel block number of a parallel processing control information region and a second parallel block number of a thread information region, and

determining means for determining whether a corresponding thread should execute said next parallel processing block, wherein when execution is required, determining said next parallel processing block to be executed with reference to said second parallel block number, and when execution is not required, generating a parallel processing block control information region to said next parallel processing block.

4. (currently amended) An information processing system including a plurality of processors for carrying out predetermined information processing,

the information processing system comprising:

parallel processing block-forming means for dividing a program to be executed into a plurality of parallel processing blocks;

thread-forming means for dividing said parallel processing blocks generated by said parallel processing block-forming means, into threads which are basic units to be assigned respectively to said plurality of processors for being processed thereby; and

instructing means for instructing a predetermined processor to execute a next parallel processing block when said predetermined processor has terminated execution of said ~~a~~ respective thread assigned thereto, wherein said instructing means comprises

comparing means for comparing a first parallel block number of a parallel processing control information region and a second parallel block number of a thread

Docket No.: 1095.1184

Serial No. 09/838,166

information region, and

determining means for determining whether a corresponding thread should execute said next parallel processing block, wherein when execution is required, determining said next parallel processing block to be executed with reference to said second parallel block number, and when execution is not required, generating a parallel processing block control information region to said next parallel processing block.

5. (cancelled)

6. (cancelled)

7. (new) A method comprising:

dividing a program to be executed into a plurality of parallel processing blocks;  
dividing the parallel processing blocks into threads to be respectively assigned to a

plurality of processors;

designating a parallel processing block number to each of the assigned threads  
corresponding to the parallel processing block being executed by the assigned threads at a  
predetermined time;

comparing the parallel processing block number corresponding to a leading thread of the  
assigned threads to a parallel block number corresponding to each of the assigned threads; and

determining whether the leading thread should execute a next parallel processing block,  
wherein when execution is required, determining the next parallel processing block to be  
executed with reference to the parallel processing block number of the leading thread.

8. (new) An information processing system comprising:

means for dividing a program to be executed into a plurality of parallel processing blocks;

means for dividing the parallel processing blocks into threads to be respectively assigned

to a plurality of processors;

means for designating a parallel processing block number to each of the assigned  
threads corresponding to the parallel processing block being executed by the assigned threads  
at a predetermined time;

means for comparing the parallel processing block number corresponding to a leading  
thread of the assigned threads to a parallel block number corresponding to each of the assigned  
threads; and

Serial No. 09/838,166

Docket No.: 1095.1184

means for determining whether the leading thread should execute a next parallel processing block, wherein when execution is required, determining the next parallel processing block to be executed with reference to the parallel processing block number of the leading thread.